

# Developmental Pathways into Social and Sexual Deviance

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**Abstract** Path analysis was used to assess the contribution of four exogenous developmental variables (sexual abuse, physical abuse, exposure to violence, exposure to pornography—each occurring prior to age 13) and four personality constructs (“psychopathic and antagonistic attitudes,” “psychosocial deficits,” “pedophilia,” “hostile masculinity”) to the prediction of non-sexual delinquency and number of male child victims in a sample of 256 adolescent males with a history of “hands-on” sexual offending. “Psychosocial deficits” was found to partially mediate the effects of the exogenous variables on both outcomes. Exposure to violence both directly, and indirectly through “psychopathic and antagonistic attitudes,” contributed to the prediction of non-sexual delinquency. Sexual abuse by a male directly, and indirectly through “hostile masculinity” and “pedophilia”, contributed to prediction of number of male child victims. Clinical implications of the findings are discussed.

**Keywords** Pathways · Social deviance · Sexual deviance · Adolescents

The present study built on the investigator’s prior research on etiological antecedents and personality factors that help explain social and sexual deviance in adolescent males. In

earlier research (Hunter et al. 2004), the investigators explored the presence of three personality factors in adolescent males who had engaged in sexual and non-sexual delinquency: “hostile masculinity,” “egotistical-antagonistic masculinity,” and “psychosocial deficits.” Hostile masculinity is a key construct in Malamuth’s “confluence” model of sexual aggression and reflects dominance motives associated with negative perceptions of women and interpersonal rejection experiences (Malamuth 1996; Malamuth et al. 1993). In the confluence model, hostile masculinity synergistically acts with “promiscuous-impersonal sex” (i.e., a preference for casual sexual relations without emotional closeness or commitment) to predict sexually aggressive behavior toward females (Malamuth et al. 1995). The confluence model has received considerable empirical support in a variety of ethnic groups in the United States (e.g., Abbey et al. 2006; Hall et al. 2005; Jacques-Tiura et al. 2007), as well as in a variety of other countries (e.g., Lim and Howard 1998; Martin et al. 2005).

Egotistical-antagonistic masculinity represents a stereotypically masculine sex role orientation and the tendency to aggressively seek dominance in sexual competitions with other males. A major indicator of this construct has been found to predict delinquency in youth (Rowe et al. 1997). The psychosocial deficits factor reflects affective distress (i.e., depression and anxiety) and perceived difficulty with social relationships. In their prior research, the authors found that hostile masculinity was positively influenced by egotistical-antagonistic masculinity and psychosocial deficits, and that the latter two factors were both positively related to non-sexual aggression and delinquency (Hunter et al. 2004). “Psychosocial deficits” were found to predict sexual offending against a prepubescent child, as opposed to an adolescent or adult.

The present study explored pathways into social and sexual deviance in a new and larger sample of adolescent males who had engaged in sexually abusive behavior, and expanded the number of explored etiological antecedents and personality

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constructs. Exposure to pornography as a child was added due to clinical observation of its increasing prevalence in the developmental histories of treated sexually abusive youth, and because emerging research suggests that it may propel them toward greater levels of aggression (Alexy et al. 2009). The studied “egotistical-antagonistic masculinity” construct was broadened to encompass closely related psychopathy traits. Psychopathy has been found to be a robust predictor of both sexual and non-sexual crime in adult men (Kingston et al. 2008; Beggs and Grace 2008), and clinically observed to be present in varying degrees in treated adolescent male sex offenders. A sexual deviance (i.e., pedophilia) factor was also added so as to account for another robust predictor of sexual re-offending in adult sex offenders (Hanson and Morton-Bourgon 2005), and in accordance with its inclusion in popular juvenile sex offender-specific risk assessment instruments (e.g., J-SOAP-II).

As in the previous study, the investigator’s model is organized into several successive waves of hypothesized causal influence, which were theoretically specified. The first wave is composed of exogenous environmental background variables, such as childhood exposure to violence and pornography. The second wave is composed of psychosocial deficits. The third wave is of more complex individual difference factors, such as “psychopathic and antagonistic attitudes” (the expanded egotistical-antagonistic construct) and “hostile masculinity.” The fourth and final wave consists of outcome variables representing sexual and non-sexual offending. The focus of sexual offending was number of male victims. This specific outcome was chosen because sustained sexual interest in young males (i.e., same-gender pedophilia) is associated with relatively high rates of sexual recidivism in adult male sex offenders (Hanson and Morton-Bourgon 2005), and adolescent sex offenders with male victims have been found to have higher levels of phallometrically measured deviant sexual arousal (Hunter et al. 1994). Thus, having male victims is viewed as a risk factor for continuation of sexual offending into adulthood.

## Methods

### Participants

Youth were recruited from court-affiliated and corrections-based community and residential treatment programs for juvenile sex offenders in five states: Virginia, Ohio, North Carolina, Missouri, and Colorado. All male youth between the ages of 13 and 18 with a history of “hands-on” sexual offending were invited to participate in the study. Participation required both youth and parental informed consent. Approximately three-quarters of approached youth and parents agreed to participate. Youth were paid \$25.00 for participating where

institutional policy did not prohibit such payment. Youth were screened for a minimum of fifth grade reading level using the Ohio Literacy Test. Youth were at various stages in the treatment process at the time of their participation.

Assessment data were collected on 285 youth, following elimination of approximately 7% of interested youth for not meeting the stipulated reading criterion. Application of the cited age and contact offense criteria resulted in a final sample of 256 youth. Participating youth ranged in age from 13 to 18 years, with an overall mean age of 16.2 years. Approximately, 70% of the overall sample was Caucasian, 21% African-American, 7% Hispanic, and 2% “Other”.

### Procedures

Trained research assistants coded sexual offense and criminal history data from institutional records. Survey data were collected under the supervision of a senior research assistant—a mental health therapist and a Virginia-certified sex offender treatment provider. Youth were individually interviewed with the Self Report Delinquency scale (SRD) (Elliott and Huizinga 1983) to determine their level of involvement in aggressive and delinquent behavior during the preceding 12 months (in the case of residentially placed youth, the 12 months prior to placement). Youth were also administered a battery of assessment instruments designed to measure the personality constructs of interest.

To help ensure validity of self-report data, and to attenuate to the extent possible a social desirability report bias, youth were assured through the informed consent process that all collected personality, attitudinal, sexual interest, and delinquent behavior data were confidential and would not be shared with therapists, program administrators, or parents. In support of maintaining the confidentiality of the data, no names or other identifying information were placed on research forms. Instead each participant was assigned a number that was placed on the research form. A master list matching the youth’s name with his research number was kept under lock and key at the research site, accessible to only the Senior Research Assistant.

### Measures

The following measures were administered relative to each studied factor.

#### *Exogenous Variables*

A *Social History Questionnaire* was used to define four exogenous variables: 1) extent of exposure to pornography prior to age 13, 2) extent of exposure to male-modeled violence prior to age 13, 3) extent of physical abuse by a father or stepfather prior to age 13, and 4) extent of sexual abuse by a male perpetrator prior to age 13.

### Hostile Masculinity

*Hostility Toward Women* is a 21-item instrument reflecting a negative stereotypic view of females as rejecting and untrustworthy (e.g., “It is safer not to trust girls”) (Check 1985).

*Adversarial Sexual Beliefs* is a 9-item scale assessing the degree to which male-female relationships are perceived to be antagonistic (e.g., “In a dating relationship a woman is largely out to take advantage of a man”) (Burt 1980).

*Moral Disengagement Scale* is a 32-item instrument that provides 7-point ratings of the acceptability of violence and sexual aggression directed at females. Malamuth has used it in sexual aggression research (e.g., “It is okay for a man to force himself on some women because some really don’t care anyway.”). This scale was based on the work of Albert Bandura and associates who focused on moral disengagement generally (e.g., Bandura et al. 1996). Malamuth adapted it to specifically focus on sexual coercion.

*Sexual Functions Index (Dominance Scale)* consists of 8 items that measure dominance motives (Nelson 1979).

*Revised Attraction Scale (Sexual Aggression)* consists of twenty items assessing sexual interest in rape and sexual coercion. These items are embedded in a series of items measuring interest in a variety of sexual activities (Malamuth 1989).

### Psychopathic and Antagonistic Attitudes

*Mating Effort Scale* is a 10-item scale that measures intrasexual competition amongst males in the pursuit of females, and a preference for multiple sexual partners (Rowe et al. 1997).

*Negative/Positive Masculinity/Femininity*- nine items were used that measure negative masculinity (e.g. “I am a bossy person”) (Spence et al. 1979).

*Personality Research Form-Form E (“Impulsivity Scale”)* consists of 15 items used by Malamuth et al. (1995) to assess impulsiveness (e.g., “I often say the first thing that comes to my head.”) (Jackson 1987).

*Levenson Self Report Psychopathy Scale* is a 26-item instrument measuring psychopathic personality traits (Levenson et al. 1995).

*Youth Self Report (Rule Breaking Behavior)* consists of 15 items assessing propensity for engagement in delinquent and antisocial behavior (e.g., “I lie or cheat.”).

### Psychosocial Deficits

*Youth Self Report (Anxious/Depressed, Social Problems, and Withdrawn/Depressed)*- these scales respectively measure poor self-esteem and loneliness, immaturity and peer rejection, and social isolation (Achenbach and Dumenci 2001).

### Pedophilia

*Revised Attraction Scale (Pedophilic Interests)* consists of four items that assess sexual interest in children (Malamuth 1989).

### Outcome Variables

*Number of Male Victims* was coded from a case file review instrument used by the investigators in previous juvenile sex offender research (Hunter et al. 2004).

*Non-Sexual Delinquency* was based on participant responses to the *Self Report Delinquency Scale (SRD)* (National Youth Survey) (Elliott and Huizinga 1983).

### Statistical Analyses

All univariate and multivariate analyses were performed using SAS 9.1. Because it was not possible to analyze all of the individual items within a single multivariate model simultaneously due to the limitations of our sample size, a hierarchical analytical strategy was employed. First, items were theoretically assigned to hypothesized lower-order factor scales. Then, unit-weighted common factor scores (Gorsuch 1983) were computed for all the lower-order factor scales and several higher-order factors in SAS PROC STANDARD and DATA, using the means of the standardized item scores for all non-missing items on each subscale (Figueredo et al. 2000). Although this procedure addressed most of our missing data, only 256 cases were usable for the SEM due to the remaining missing data.

Also computed were both the Cronbach’s alphas and the covariance matrices of the lower-order factor scales in SAS PROC CORR. The internal consistencies of each of these lower-order factor scales are presented in Table 1. Some of these lower-order scales had somewhat lower alphas due to a low number of items, but had acceptable item-scale

**Table 1** Internal consistency of scales

Scale	Cronbach’s Alpha
Adversarial Sexual Beliefs	.81
Hostility Toward Women	.86
Moral Disengagement Scale	.92
Sexual Functions Inventory (Dominance)	.79
Revised Attraction Scale (Sexual Aggression)	.90
Revised Attraction Scale (Pedophilic Interest)	.83
Mating Effort Scale	.82
Impulsivity Scale	.69
Youth Self Report	.93
Levenson Self Report Psychopathy Scale	.84
Masculinity-Femininity	.82

correlations. The loadings (scale-factor correlations) of the unit-weighted higher-order factors on the lower-order factor scales are presented in Table 2.

All the unit-weighted factor scales were entered as manifest variables for multivariate causal analysis within a single structural equation model. Structural equation modeling was performed by SAS PROC CALIS. Standardized subscales were theoretically assigned to higher-order constructs and tested for convergent validity. Structural equation modeling between these constructs then provided a multivariate causal analysis of the structural relations between them.

## Results

### Structural Equation Model

Our structural equation model was evaluated by means of multiple indices of fit. The model fit by both statistical ( $\chi^2(23)=29.018$ ,  $p=.1797$ ) and practical ( $CFI=.984$ ,  $NNFI=.969$ ,  $NFI=.932$ ,  $RMSEA=.033$ ) indices of fit. Figure 1 displays the complete path model with standardized regression coefficients. All causal pathways shown are statistically significant ( $p<.05$ ).

There were four exogenous variables, among which the correlations were freely estimated: *Exposure to Violence*, *Exposure to Pornography*, *Sexual Victimization by Males*, and *Physical Abuse*. These correlations are not shown in the path diagram to avoid visual clutter, but are presented in Table 3.

**Table 2** Unit-weighted factor scores

Factor	Lambda
<b>Hostile Masculinity</b>	.73
Adversarial Sexual Beliefs	.71
Hostility Toward Women	.62
Moral Disengagement Scale	.65
SFI Dominance	.58
Attraction to Sexual Aggression	.65
<b>Antagonistic and Psychopathic Attitudes</b>	.73
Mating Effort Scale	.66
Negative Masculinity	.83
Impulsivity	.75
Levenson Self Report Psychopathy Scale	.87
Rule Break (Youth Self Report)	.88
<b>Psychosocial Deficits</b>	.81
Anxiety/Depression (Youth Self Report)	NA
Social (Youth Self Report)	.73
Withdrawal/Depression (Youth Self Report)	.71
<b>Pedophilia</b>	.62
Revised Attraction Scale (Pedophilic Interests)	.65

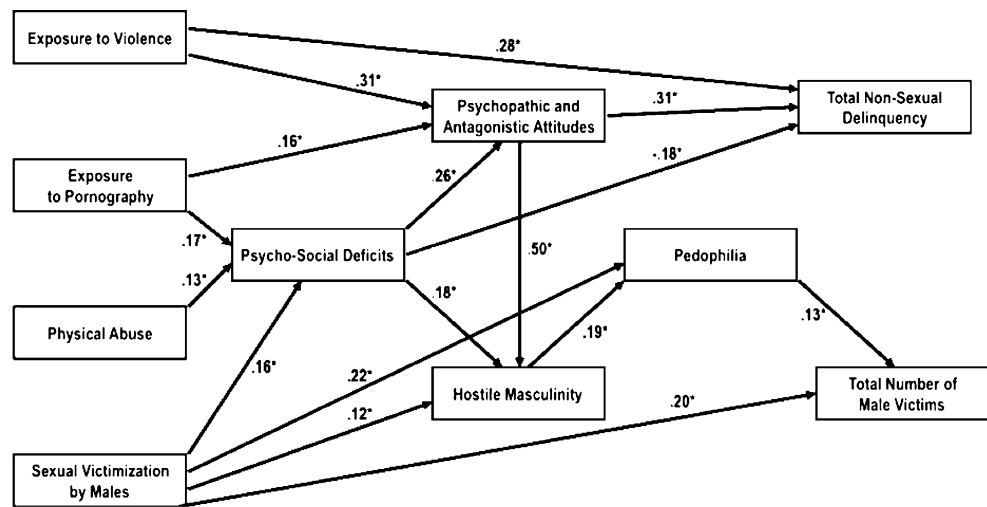
The prediction equations will be described for each of the endogenous variable in turn:

1. *Psychosocial Deficits* was significantly increased by *Exposure to Pornography* ( $\beta=.16$ ), *Physical Abuse* ( $\beta=.13$ ), and *Sexual Victimization by Males* ( $\beta=.17$ ).
2. *Psychopathic and Antagonistic Attitudes* was significantly increased by *Exposure to Violence* ( $\beta=.31$ ), *Exposure to Pornography* ( $\beta=.16$ ), and *Psychosocial Deficits* ( $\beta=.26$ ).
3. *Total Non-Sexual Delinquency* was significantly increased by *Exposure to Violence* ( $\beta=.28$ ) and *Psychopathic and Antagonistic Attitudes* ( $\beta=.31$ ); it was significantly decreased by *Psychosocial Deficits* ( $\beta=-.18$ ).
4. *Hostile Masculinity* was significantly increased by *Psychopathic and Antagonistic Attitudes* ( $\beta=.50$ ), *Psychosocial Deficits* ( $\beta=.18$ ), and *Sexual Victimization by Males* ( $\beta=.12$ ).
5. *Pedophilia* was significantly increased by *Hostile Masculinity* ( $\beta=.19$ ) and *Sexual Victimization by Males* ( $\beta=.22$ ).
6. *Total Number of Male Victims* was significantly increased by *Pedophilia* ( $\beta=.13$ ) and *Sexual Victimization by Males* ( $\beta=.20$ ).

### Summary of Effects

There appear to be two main developmental pathways in this model, both stemming from the four exogenous background variables and at least partially mediated by *Psychosocial Deficits*. One of these pathways leads through *Psychosocial Deficits* and by way of *Psychopathic and Antagonistic Attitudes* to *Total Non-Sexual Delinquency*. The other major pathway leads through *Psychosocial Deficits* and by way of *Hostile Masculinity* to *Pedophilia* and to *Total Number of Male Victims*. The multiple squared correlations for these two ultimate outcome variables were  $R^2=.22$  for *Total Non-Sexual Delinquency* and  $R^2=.07$  for *Total Number of Male Victims*. This path model therefore clearly did a better job of accounting for the variance in *Total Non-Sexual Delinquency* than for the variance in *Total Number of Male Victims*. Nevertheless, the model did an even better job of predicting the two major mediating risk factors, *Psychopathic and Antagonistic Attitudes* ( $R^2=.25$ ), and *Hostile Masculinity* ( $R^2=.39$ ), although the model did not do as well in predicting *Pedophilia* ( $R^2=.11$ ). Aside from the common and partially mediating influence of *Psychosocial Deficits*, the only other major crossover point between these two developmental pathways was the very large effect ( $\beta=.50$ ) of *Psychopathic and Antagonistic Attitudes* on *Hostile Masculinity*. Although we had originally hypothesized that *Psychosocial Deficits* would be the major mediator in the model, only a relatively small amount

**Fig. 1** Structural equation model for juvenile sex offenders



\*p<.05

of variance ( $R^2=.10$ ) in *Psychosocial Deficits* was predicted by the exogenous variables, with several of the exogenous variables exerting larger direct effects further downstream. *Psychosocial Deficits* itself only had moderate effects on the mediating risk factors *Psychopathic and Antagonistic Attitudes* ( $\beta=.26$ ) and *Hostile Masculinity* ( $\beta=.18$ ).

**Discussion**

Although it must be acknowledged that this is a cross-sectional study, and the order specified among the variables is purely theoretical and not based on any observed temporal sequences, we have identified two likely developmental pathways leading to problematical behavior in juvenile sex offenders. The first major developmental pathway may be characterized as a *Social Deviance* pathway, partially mediated by psychosocial deficits, leading through psychopathic and antagonistic attitudes and finally to non-sexual delinquency. The second major developmental pathway may be characterized as a *Sexual Deviance* pathway, also partially mediated by psychosocial deficits, leading through hostile masculinity and pedophilic interests, and finally to sexual offending against male children. Of course, these two pathways are not completely independent of one another, because most youth engage in both forms of behavior. However, *Sexual Deviance* has some unique influences that

play a less prominent role in the *Social Deviance* pathway, ultimately leading to some qualitatively different outcomes in the realm of sexual offending. These data fit well with Malamuth’s (2003) recent description of the “hierarchical-mediational confluence model”, whereby the impact of more “general” antisocial and problematic characteristics (i.e., psychopathic tendencies and psychosocial deficits) on outcomes such as sexual aggression is mediated by characteristics more “specific” (i.e., Hostile Masculinity) to the particular outcome.

In our structural model, the more distal causes of all these psychological and behavioral problems are various adverse and presumably exogenous characteristics of the developmental environment, including both direct physical and sexual victimization of the developing child, and early exposure to inappropriate violent and sexual stimuli. These may be exerting their effects in various alternative but not mutually exclusive ways. One is direct damage to the cognitive, emotional, and social functioning of the child, as encapsulated in the construct that we labeled psychosocial deficits. Afflicted youth evidence low social self-esteem and mood disturbance, in the form of anxiety and depression. These afflictions may hamper their attainment of developmental tasks, including establishment of healthy peer relationships.

Another way that these developmental influences may exert their effect is through the direct modeling of antisocial behaviors, as by early and inappropriate exposure to violent

**Table 3** Correlations among exogenous variables

	1.	2.	3.	4.
1. <i>Exposure to Violence</i>	1.000*			
2. <i>Sexual Victimization by Males</i>	.336*	1.000*		
3. <i>Physical Abuse</i>	.200*	.161*	1.000*	
4. <i>Exposure to Pornography</i>	.309*	.280*	.208*	1.000*

\*p<.05

and pornographic stimuli and presumably to antisocial role models, which may play a role in the development of unhealthy, antagonistic, and adversarial antisocial strategies, and in interfering with the development of normal, healthy, mutualistic, and cooperative prosocial strategies. This mediating mechanism is consistent with the perspectives of social learning theory (Bandura 1973).

An alternative mediating mechanism is consistent with the perspectives of evolutionary psychological theory (Malamuth 1996, 1998). Figueredo and Jacobs (2009) have proposed that slow life history strategists (who invest more resources in survival than in reproduction) are more prone to adopt mutualistic social strategies and that fast life history strategists (who invest more resources in reproduction than in survival) are more prone to adopt antagonistic social strategies. Therefore, another way that these adverse characteristics of the childhood environment may be fostering the development of social and sexual deviance is by biasing behavioral development towards faster life history strategies (see Brumbach et al. 2009; Ellis et al. 2009). Both the behavioral evolution and development of faster life history strategies are fostered by environments that are unstable, unpredictable, and uncontrollable. Early exposure to physical and sexual victimization, including inappropriately violent and sexual stimuli, may be collectively providing cues to a harsh, dangerous, and hyper-sexualized social environment. Such environments are fraught with hazards of *extrinsic* or uncontrollable morbidity and mortality, providing unconscious cues to the developing child that a faster life history strategy, including elements of social and sexual deviance, might be the most adaptive strategy for short-term survival and early reproduction. Of course, outside the dysfunctional childhood microenvironment in which this development took place, such strategies might not be at all adaptive and may bring the juvenile into serious conflict with the broader social norms of civilized society (see Bronfenbrenner 1979).

One potential limitation of the present study is that for the four primary “environmental” background variables to have causal efficacy, they must be “extrinsic” or “exogenous” to the developing child to a meaningful degree. The developing child is presumably placed into these adverse environments and responds accordingly. However, it is possible that these environmental variables were not fully exogenous. That is, the developing child’s own behaviors, including genetically influenced personality dispositions, may have influenced that extent to which they were exposed to these adverse environments (e.g., certain youth may be more prone to seek out pornographic materials).

### Clinical Implications

Results provide general guidance in both the reduction of risk for developing social and sexual deviance, and the clinical

address of youth with already manifest problems. There is support for the contention that early developmental violence exposure and trauma experiences are harmful and predispose youth to deviant attitudes and behavior. Exposure to violence appears to support development of antisocial attitudes and perhaps through modeling directly contributes to the likelihood of engagement in such behavior. Childhood exposure to pornography also appears to contribute to antagonistic and psychopathic attitudes, likely through the depiction of distorted views of human sexuality and glorification of promiscuity. Both childhood physical and sexual abuse appear to damage the developing youth’s sense of social self-esteem and emotional well-being, and increase his “down-stream” risk of social and sexual deviance. As shown in previous research, child sexual victimization by a male directly and indirectly predicts sexual offending against male children. The direct effect likely represents modeling. The indirect effect may reflect erotization to related stimuli.

It, therefore, would seem prudent to develop early intervention programming for youth who are at higher risk for social and sexual deviance by virtue of these developmental experiences. The investment of public dollars in the development of such programs may help offset the very substantial cost of later having to treat and incarcerate such youth. The conducted research suggests that such intervention could be both individualized and prescriptive, based on the particular risk factors to which he has been subjected. For example, youth with heavy childhood exposure to pornography may benefit from healthy masculinity training. Such training could include correction of distorted images of masculinity and female sexuality, and the teaching of a model of healthy interpersonal sexual behavior as predicated on gender equality, mutuality, and proper developmental readiness. Conversely, sexually and physically victimized children would appear to benefit from the building of self-esteem and social competency. The latter could include the correction of attributions of blame and responsibility, and the teaching of social and anger management skills.

As this and other research suggests that abused youth are at higher risk for affective disorders (Brown et al. 2008), careful attention would also need to be given to mood and the address of maladaptive cognitions that may be contribute to depression and anxiety. Of further note, a number of abused youth also manifest PTSD. It has been the first author’s observation that “re-experiencing” symptoms in sexually abused youth sometimes includes recurrent sexual affects and images. It can be speculated that left untreated these may contribute to the subsequent sexual acting-out of a number of these youth (i.e., erotization and discharge of pent-up sexual tension). Therefore, a focus of prevention and early intervention programming should be the careful screening of abused youth for PTSD. Early treatment may not only relieve affective distress and mood instability but also help attenuate the risk of later externalizing problems.

The conducted research also has implications for the treatment of youth who have already engaged in socially and sexually deviant behavior. As childhood pornography exposure has become more prevalent in juvenile sex offenders in recent years, treatment programs must attempt to correct the negative messages in such material. Unlike the majority of adults, most juveniles have not had the opportunity to have counterbalancing real-life experiences with sexual partners. As a consequence, they are especially susceptible to internalization of distorted pornographic images of human sexuality and may act accordingly. The first author has seen this clinically in a number of youth who have exposed their genitalia to same-age or older females. Their expectation, in some part based on pornographic movies, was that the females would become sexually aroused and desire to have sex with them. In some cases when the female reacted negatively, the youth interpreted this as proof that females are often manipulative and ultimately rejecting of males. As in the case of the referenced youth in treatment, such perceptions may trigger an aggressive response in the form of rape.

The current research suggests that sexual victimization has both direct and indirect effects on engagement in sexual offending behavior. As discussed, it appears to contribute to affective instability and may contribute to pent-up sexual tension and preoccupation. Thus, intervention programs for sexually abusive youth should also carefully screen for PTSD and offer adjunctive therapies that have been empirically demonstrated to bring about symptomatic relief (e.g., “Prolonged Exposure”). It has been the first author’s clinical experience that active treatment of chronic PTSD in these youth produces considerable secondary gain in treatment motivation and mood/behavioral stability. However, it may have the secondary benefit of decreasing sexual preoccupation and deviant sexual interests. In this regard, youth who appear to be developing deviant sexual interests may no longer present that way following successful treatment of their chronic PTSD.

Outcome research clearly shows that adolescent male sex offenders are far more likely to commit non-sexual crimes than sexual ones after discharge from treatment programs (Waite et al. 2005). The present study suggests that a major pathway for such behavior is through the emergence of antagonistic and psychopathic attitudes. Exposure to violence appears to contribute to the development of such attitudes and directly contribute to engagement in non-sexual delinquency. Psychosocial deficits may also create a vulnerability to the adoption of such attitudes. It is recommended that treatment programs for juvenile sex offenders become more holistic and not have as their singular focus reduction of the risk of sexual re-offending. Instead, relapse prevention and skill-building therapeutic interventions should have a dual focus—reducing social and sexual deviance. The enhancement of social competence

must include a focus on the establishment of pro-social attitudes and the formation of positive peer relationships. Treatment and mentoring efforts should be directed at teaching conflict resolution and the attainment of goals and rewards through assertive and not aggressive behavior. To be maximally effective, treatment efforts should also address systemic factors that support social and sexual deviance, including family issues and environmental risk factors (e.g., proximity to high crime areas, gang violence, etc.).

#### Summary and Directions for Future Research

The present study extends the authors’ research on both distal and more proximal antecedents of social and sexual deviance in adolescent boys. This research expanded the egotistical-antagonistic masculinity construct to include psychopathic attitudes, added a sexual deviance factor to the predictive model, and added the study of pornography as a more distal/etiological risk factor. The expanded model produced an adequate fit using path analytic statistical methods and reflects greater elaboration of the interrelationship between developmental risk factors, personality constructs, and behavioral outcomes. The expanded set of endogenous personality constructs forms the basis for newly conducted cluster analyses that will be reported in a forthcoming article. This article will include the description of five prototypic subtypes of socially and sexually deviant adolescent males and their unique etiological, personality, and offense characteristics.

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